

Compiler Technology: Tools, Translators and Language Implementation. By Derek Beng Kee Kiong. Kluwer Academic Publishers, Boston, MA. (1997). 210 pages. \$97.50, NLG 210.00, GBP 64.35.

Contents:

Preface. Acknowledgement. 1. Introduction to language implementation. 2. Language definition. 3. Lexical scanners. 4. Syntactic analysis. 5. Incorporating semantic analysis. 6. Semantic processing. 7. The program run-time environment. 8. Intermediate code and interpreters. 9. Code generation. Bibliography. Appendix. Index.

Video on Demand Systems: Technology, Interoperability and Trials. Edited by Shih-Fu Chang, Dimitris Anastassiou, Alexandros Eleftheriadis and John V. Pavlik. Kluwer Academic Publishers, Boston, MA. (1997). 222 pages. \$75.00, NLG 160.00, GBP 51.00.

Contents:

Guest editorial (Shih-Fu Chang, Dimitris Anastassiou, Alexandros Eleftheriadis and John V. Pavlik). Part I. VoD testbed development and DAVIC interoperability test. DAVIC and interoperability experiments (Hari Kavla, Shih-Fu Chang and Alexandros Eleftheriadis). ARMIDATM: Multimedia applications across ATM-based networks accessed via Internet navigation (Pietro Marchisio, Marco Mesturino, Enrico Polese and Giovanni Venuti). An interoperability test-bed and test results for DAVIC 1.0 specification (Hidenori Okuda, Masahiro Morinaga, Hisashi Kasahara and Kazunori Shimamura). A VoD application implemented in Java (Alex De John, Karen Hsing and David Su). Columbia's VoD and multimedia research testbed with heterogeneous network support (Dimitris Anastassiou, Stephen Jacobs, Hari Kalva and Javier Zamora). Part II. VoD and interactive TV trials. The video-on-demand trial in Taiwan: A partially DAVIC compliant system (Yuan-Liang Su, Kae-Jy Chou, Chih-Wen Cheng, Jin-Jen Hsue, Fu-Yung Lai, Jun-Lin Liu and Chun-I Wang). "NTT's joint utilization tests of multimedia connections"—Utilization tests for CATV and VOD over FTTH (Isao Omiya). Part III. Applications and content providers. Interactive television trials and marketplace experiences (John Carey). From interactive television to Internet applications (Gary Glenn Hartwick).

Hardware/Software Co-Design: Principles and Practice. By Jørgen Staunstrup and Wayne Wolf. Kluwer Academic Publishers, Boston, MA. (1997). 395 pages. \$98.00, NLG 215.00, GBP 64.70.

Contents:

Contributing authors. Preface. 1. Essential issues in codesign (Daniel D. Gajski, Jianwen Zhu and Rainer Dömer). 2. Hardware/software co-synthesis algorithms (Wayne Wolf). 3. Prototyping and emulation (Wolfgang Rosenstiel). 4. Target architectures (Rolf Ernst). 5. Compilation techniques and tools for embedded processor architectures (Clifford Liem and Pierr Paulin). 6. Design specification and verification (J. Staunstrup). 7. Languages for system-level specification and design (A.A. Jerraya, M. Romdhani, C.A. Valderrama, Ph. Le Marrec, F. Hessel, G.F. Marchioro and J.M. Daveau). 8. The Cosyma system (Achim Österling, Thomas Benner, Rolf Ernst, Dirk Herrmann, Thomas Scholz and Wei Ye). 9. Hardware/software partitioning using the LYCOS system (Jan Madsen, Jesper Grode and Peter V. Knudsen). 10. Cosmos: A transformational co-design tool for multiprocessor architectures (C.A. Valderrama, M. Romdhani, J.M. Daveau, G. Marchioro, A. Changuel and A.A. Jerraya). References. Index.

Integral, Measure, and Ordering. By Beloslav Riečan and Tibor Neubrunn. Kluwer Academic Publishers/Ister Science, Dordrecht/Bratislava. (1997). 378 pages. \$169.00, NLG 285.00, GBP 99.00.

Contents:

1. Sets and fuzzy sets. 2. Null sets and small systems. 3. Measures on ordered spaces. 4. Subadditive measures. 5. The Kurzweil integral in ordered spaces. 6. Quantum logics. 7. Fuzzy-quantum spaces. 8. Fuzzy quantum logics. 9. Probability on MV algebras. 10. The entropy of fuzzy dynamical systems. 11. Measurability and integrability of multifunctions. Appendices. A. D-posets. B. Notes on order convergence and order topology. References. Index.

System Synthesis with VHDL. By Petru Eles, Krzysztof Kuchcinski and Zebo Peng. Kluwer Academic Publishers, Boston, MA. (1998). 370 pages. \$115.00, NLG 250.00, GBP 75.90.

Contents:

Preface. I. Preliminaries. 1. Introduction. 2. VHDL. 3. High-level synthesis. 4. System-level synthesis. 5. Optimization heuristics. II. Transformational approach. 6. Transformational design basics. 7. Synthesis of advanced features. 8. Hardware/software partitioning. III. Advanced issues. 9. Test synthesis. 10. Low-power synthesis. Bibliography. Index.

Elements of Scientific Inquiry. By Eric Martin and Daniel Osherson. MIT Press, Cambridge, MA. (1998). 270 pages. \$30.00.

Contents:

Preface. 1. Introduction. 2. A numerical paradigm. 3. A first-order framework for inquiry. 4. Inquiry via belief revision. Appendices. A. Solutions to exercises for Chapter 1. B. Solutions to exercises for Chapter 2. C. Solutions to exercises for Chapter 3. D. Solutions to exercises for Chapter 4. References. Symbol index. Index.